

New Generation for the New Generation: The Coal Role

Speech for Marty Huelsmann to the Southern Coals Conference, Inc.

- I. Introduction
 - A. When I first came to the Kentucky Public Service Commission, I started reading everything I could get my hands on regarding utility services. It didn't take long to realize that the energy industry was one that was seeing some dramatic changes. I would like to briefly share with you some of the more startling facts and statistics that I have come across that have really demonstrated to me that the energy industry is experiencing a paradigm shift.

According to Chris King, CEO of Utility.com, Prices for electricity in California increased by 839% between December 1999 and December 2000.

According to Restructuring Today, "Completion and construction of new generation plants in Texas will create an electricity supply this summer 23% greater than peak, firm demand."

According to a study released Jan. 31, 2001 by the National Energy Assistance Directors' Association, the number of American households needing assistance with energy bills this winter could increase by 33% because of the rising cost of heating fuels. Projected numbers indicate about 6 million households will be unable to pay their bills this winter, up from 4.5 million last heating season. (*Electric Consumers' Alliance*, February 2001)

And finally, Chairman Bob Durden from the Georgia Public Service Commission on natural gas deregulation: "We tried to fix something that wasn't broke, and now we're paying the price." *The Electricity Daily*

- B. Over the last 30 years, the energy industry has changed dramatically. From the oil embargoes of the 1970s to the environmental discussions of the 80s and the new emission reduction requirements of the 1990s, the last quarter of a century has been a dynamic one.
 - C. As we move past the year 2000, and see the restructuring of the electric industry, the unbundling of the gas industry, and the resulting situations that states around the nation find themselves in, we are facing a new energy paradigm. The calls for a national energy policy demonstrate that we are entering a new generation in the energy industry. This new generation needs new answers, needs to address new problems, and perhaps this new generation even needs "New Generation."

- D. As coal producers and others involved in the coal industry, this new generation can be a time of golden opportunity. In a time when we see the importance of having a balanced energy policy, it is an ideal time to examine the "COAL ROLE," the role that coal can play in this "new generation" of energy.
 - E. I'm going to cover three major points tonight.
 - 1. First, I want to talk about how electricity generation has become central to our lives and to our economy.
 - 2. Second, I want to talk about some lessons that California taught us over this past year.
 - 3. Finally, I want to talk about how Kentucky is evaluating the new energy paradigm, and how coal may find some new opportunities in fitting into that future.
- II. First, Let's talk about how electricity generation has become central to our lives and to our economy.
- A. Electricity central to Economic Development
 - 1. In a paper called "Coal for the Future: Sustainable Development," Mike Musulin pointed out that in comparing the ranking of states with the best and worst job prospects with the price of electricity in those states, you see a strong correlation between the two factors. He states "The 12 states with the lowest priced electricity include seven states with the best job prospects. Similarly, 12 states with the highest priced electricity include 11 of the states with the worst job prospects."
 - 2. Kentucky has always enjoyed some of the lowest priced electricity in the nation. That low-cost electricity has traditionally been one of our most powerful tools in economic development efforts. (As a side note, I know that you don't need me to point out that that low-cost electricity has traditionally been because of the abundance and availability of coal in this state.)
- Transition statement: So electricity is important in economic development, it creates a positive environment for the growth of jobs. But that is really not new information. What is new is the growing need for electricity.*
- B. Growth of electricity usage and need.
 - 1. EIA projects that by 2020, 1,310 new power plants, of an assumed average of 300 megawatts each, will be needed to meet growing electricity demand and to replace aging power plants.
 - 2. The EIA also projects a 1.2% growth per year of energy consumption, with the most rapid growth being for computers, electronic equipment, and appliances. For commercial energy consumption, a growth rate of 1.4% is projected, again, largely for the increased use of computer and electronic equipment and telecommunication needs. EIA projects the demand of electricity itself to grow at a rate of 1.8% per year through 2020.
 - C. Are we underestimating growth in demand for electricity?

1. The projections according to EIA are, we have to believe, based on reliable data. But projections can be wrong, and if we underestimate growth in demand, we can get into trouble.
2. According to Matthew Simmons, president of Simmons and Company, when the National Petroleum Council demand task force was preparing its long-term demand forecasts, they were "puzzled by the inconsistency of an almost 30-year historical growth in electricity demand of 3% per year, and a government forecast of growth in a 1.3% year range." So, he says, they backed into a "split the difference" model of 2.1% growth in electricity demand per year. He goes on to point out what a mistake that was, because in 2000, from the best data available, electricity demand grew twice as fast.
3. Underestimating growth in electricity demand contributed to the kinds of problems we're seeing now in California. In 1998, the California Energy Commission forecasted annual demand growth of 2.3% between 1998 and 2004. According to the Edison Electric Institute, the actual monthly peaks in the spring of 2000 ranged from 5.3% percent to 21 percent more than 1999.

Transition Statement: Now that I have pointed out the importance of electricity in economic development and our personal lives, let's take a look at the lessons that California has taught us about dependence on others for providing our electricity.

- III. As important as electricity is to our homes and our economy, it is critical that we pay attention to the energy industry throughout the United States, particularly the events in California, and learn how to deal with the new paradigm, the "new generation" of the energy industry. Although the market was designed around expected electricity surpluses, the state has been dependent on others for outside power.
 - A. According to Alaska Senator Frank Murkowski, California depended on 25% of its energy coming from outside the state.
 - B. No major power plants have been built in California in the last 10 years, even though power consumption is up 20%
 - C. Utilities have been caught between soaring prices and price caps, and are now facing bankruptcy.
 - D. The situation in California is affecting the prices of electricity in other states.
 1. According to Arizona Governor Jane Hull, bills for one small Arizona utility were expected to rise 300% in February because of the energy crisis in California.
 2. Although Kentucky has always claimed the "third lowest price" electricity state, we now believe that our prices are lower than Idaho and the other states that have consistently been among the lowest, because the California crisis is affecting them there.

Transition Statement: Now that we've looked at the importance of electricity, and the addressed the lessons learned from California, let me finally discuss for a few moments how we can apply those lessons to Kentucky, and at the "Coal Role" in this new energy paradigm.

- IV. In reaction to what is happening in California, and in an effort to be proactive before such dire circumstances visit Kentucky, the Kentucky PSC is evaluating the national energy industry, and looking for answers as to Kentucky's position in the new energy paradigm.
 - A. In the next month, the PSC will be opening an investigation into the adequacy of electricity generation and transmission in the state.
 - 1. Look at the existing generation and if there is a need for any more in the state.
 - 2. Look at the forecasting models, and determine if there is a danger of underestimating growth in Kentucky into the next twenty years.
 - 3. Look at the different kinds of fuel used to generate electricity in the state, and evaluate what balance is needed to keep electricity reliable and affordable in the state.
 - 4. Look at the reliance on purchased power, and if that is the most cost effective method of acquiring electricity in the state.
 - 5. Look at options for utilities in Kentucky, and how they need to be positioned as the lines begin to blur with electricity restructuring happening all around us.
 - B. Merchant plants in the State
 - 1. We have been notified of several (about 12) merchant plants proposed in the state, but we don't have jurisdiction over them.
 - 2. Only two of those are coal (Ky. Pioneer and Kentucky Mountain Power)
 - 3. We are unsure how many of these plants will actually be built and go online.
 - 4. Part of our investigation will examine the impact that these plants could potentially have on the electricity in the state, in terms of the price (since most of them are natural gas fired plants), as well as how they will affect our transmission capacity.
 - C. With the need for electricity growing, and the prices of natural gas rising, this could be a golden opportunity for the coal industry, with the strides that have been made in Clean Coal Technology, to regain some of the ground it lost during the environmental debates of the last 20 years.
 - 1. We have seen some neat projects from the Clean Coal Technology programs.
 - a. Wabash River Project in Terre Haute Indiana
 - b. EnviroPower project for Hazard, using fluidized bed technology.

2. Price-wise this is a good time for coal. Clean Coal Technology becomes cost effective when natural gas prices are at about \$5. Most financial projections indicate that natural gas industry has found a new floor at around 4-5\$ per Mcf. With a projected 92% of new generation being fueled by natural gas, that new price floor becomes quite significant.
3. With a President and Vice President that continue to push for a policy that allows for more exploration and drilling on federal lands, and the controversy surrounding those kinds of policies, this is a great time for coal to step in and offer itself, with its competitively low emissions technology, as a "less controversial" resource (that's a new one for coal, I know!). A resource that is plentiful in this country.
4. Earlier this week Mitch McConnell announced again his support for a plan that would boost coal use by offering money for research into cleaner-burning methods and tax breaks for utilities that use them. He stated "We haven't done nearly as much in that field as we should. We can produce this power cleanly."
5. Despite the controversy that sometimes surrounds the use of coal in electric generation, it has always been, and will continue to be an important part of the generation of electricity in this country.
 - a. 98% of Kentucky's power comes from burning coal.
 - b. 55% of the nation's electricity comes from the use of coal in electric generation.

It is my hope, as I know it is your hope, that this new emphasis that is being placed on alternatives to natural gas, which had become the first and only choice for new generation, will help give coal a stronger voice and a stronger role in the development of a national energy policy.

V. In conclusion, I hope I have offered you some valuable information on the growing importance of electricity generation, a picture of what happened in California, and an idea of how the Kentucky PSC hopes to respond to that situation. I also hope I have given you an idea of where my thoughts are on how Coal can play a vital role in the changing energy paradigm.

Through a thorough examination of the situations around us, and how they relate to Kentucky, it is my hope that working together with all of the stakeholders, we can make a successful transition into the new energy environment.

Thank you for the invitation to speak to you tonight, and I will be happy to take any questions that you may have at this time.